

NASA DEVELOP National Program

Potential Projects for the 2016 Fall Term (September 12 – November 18)

*** These projects are not finalized and subject to change ***

NASA Ames Research Center – Moffett Field, CA

- Elkhorn Slough Ecological Forecasting II: Understanding the Effects of Sea Level Rise, Sedimentation, and Climatic Variation in California's Elkhorn Slough
- San Francisco Bay Area Health & Air Quality II: Understanding Methane Source Emissions in the San Francisco Bay Area Using Satellite, Aircraft, and Ground-based Measurements

NASA Goddard Space Flight Center – Greenbelt, MD

- Kenya Ecological Forecasting: Utilizing NASA Earth Observations to Assess Carbon Sequestration and Climate Change Mitigation within Protected Areas in Kenya
- North Carolina Water Resources: Utilizing NASA Earth Observations and Hydrological Modeling to Monitor Nutrient Levels in Falls Lake, North Carolina for Improved Water Quality Management

NASA Jet Propulsion Laboratory – Pasadena, CA

- Costa Rica Agriculture II: Mapping Trends in Vegetation Water Stress (Evapotranspiration) over a Daily Cycle to Inform and Optimize Irrigation Practices
- California Water Resources II: Analyzing California's Current Historic Drought to Forecast the State's Future Water Balance
- Southern Arizona Ecological Forecasting: Detection and Monitoring of Non-Native Invasive Grasses in National Parks of the Southwestern U.S.

NASA Langley Research Center – Hampton, VA

- Western US Water Resources II: Utilizing NASA Earth Observations to Address Landscape Vulnerability to Drought and Climate Change in National Parks of the Western United States
- Everglades Ecological Forecasting II: Examining the Applicability of NASA Earth Observations and Google Earth Engine to Monitor and Forecast Mangrove Health and Extent in the Florida Everglades

NASA Marshall Space Flight Center – Huntsville, AL

- Lake Victoria Water Resources III: Utilizing NASA Earth Observations to Identify Water Hyacinth Dynamics and Other Water Quality Parameters in Lake Victoria
- Mekong River Basin Water Resources: Assessing the Use of NASA Precipitation and Land Surface Products to Develop an Experimental Operational Hydrologic Model for the Mekong River Basin
- Mississippi Disasters: Utilizing NASA Earth Observations to Enhance Flood Monitoring Throughout the Mississippi River Basin

NOAA National Centers for Environmental Information – Asheville, NC

- Levant & Central America Climate II: Enhancing the US Air Force, 14th Weather Squadron's Drought Monitoring and Prediction in the Levant and Central America

BLM at Idaho State University – Pocatello, ID

- East Idaho Water Resources: Leveraging Earth Observations to Identify Existing Surface Water Features in East Idaho

Maricopa County Department of Public Health at Arizona State University – Tempe, AZ

- Maricopa County Health & Air Quality II: Estimating Fine Urban Particulate Matter, Vulnerability, and the Differences Between PM_{2.5} and PM₁₀ in Maricopa County, Arizona

Mobile County Health Department – Mobile, AL

- Southeastern Arizona Water: Using NASA Earth Observations to Assist the National Park Service in Assessing Snow Cover Distribution and Persistence Changes in the Sky Islands

University of Georgia – Athens, GA

- Eastern India Ecological Forecasting: A Multi-sensor Approach to Enhance the Prediction of Mangrove Biophysical Characteristics in Chilika Lagoon and Bhitarkanika Wildlife Sanctuary, Odisha, India
- Atlanta Water Resources III: Characterizing Biophysical Features in Key Urban Areas Prioritized for Tree Planting to Reduce Stormwater Runoff in Metropolitan Atlanta to Maximize Conservation Efforts
- Costa Rica Water Resources II: Monitoring Drought and Analyzing the Water Budget in the Guanacaste Province to Enhance Decision Making and Response Planning in Costa Rica

USGS at Colorado State University – Fort Collins, CO

- Rocky Mountain National Park Climate: Reconstructing Algal Productivity and Clarity of Alpine Lakes in Rocky Mountain National Park
- Ethiopia Disasters: Utilizing NASA Earth Observations to Assess Drought Severity in Ethiopia

Wise County Clerk of Court's Office – Wise, VA

- Grand Canyon Ecological Forecasting: Utilizing NASA Earth Observations to Assist the National Park Service in Monitoring Shoreline and Sediment in the Lower Grand Canyon
- Texas Health & Air Quality: Utilizing NASA Earth Observations to Assess the Impact of Gas Flare Pollution in South Texas